

IN THE CLAIMS

1. (currently amended) A phage ~~proteinaceous~~ particle displaying on its surface a dimeric T-cell receptor (dTCR) ~~(TCR)~~, characterised in that (i) ~~the proteinaceous particle is a ribosome and the TCR is~~ or a single chain TCR (scTCR) polypeptide, wherein the scTCR or dTCR comprises an interchain disulfide bond linking residues of constant domain sequences ~~or dimeric TCR (dTCR) polypeptide pair, or~~

~~(ii) the proteinaceous particle is a phage particle, or a cell with cell surface protein or polypeptide molecules to which the TCR is covalently linked, and the TCR is a human scTCR or a human dTCR polypeptide pair, or~~

~~(iii) the proteinaceous particle is a phage particle, or a cell with cell surface protein or polypeptide molecules to which the TCR is covalently linked, and the TCR is a non-human dTCR polypeptide pair, or~~

~~(iv) the proteinaceous particle is a phage particle, or a cell with cell surface protein or polypeptide molecules to which the TCR is covalently linked, and the TCR is a scTCR polypeptide comprising TCR amino acid sequences corresponding to extracellular constant and variable domain sequences present in native TCR chains and a linker sequence, the latter linking a variable domain sequence corresponding to that of one chain of a native TCR to a constant domain sequence corresponding to a constant domain sequence of another native TCR chain, and a disulfide bond which has no equivalent in native T cell receptors links residues of the constant domain sequences.~~

2-5. (canceled)

6. (currently amended) ~~A proteinaceous~~ The phage particle of as claimed in claim 1 wherein the C-terminus of one member of the dTCR ~~polypeptide pair,~~ or the C-terminus of the

scTCR polypeptide, is linked by a peptide bond to a surface exposed residue of the phage ~~proteinaceous~~ particle.

7-54. (canceled)

55. (withdrawn) A method for the identification of TCRs with a specific characteristic, said method comprising subjecting a diverse library of TCRs displayed on phage ~~proteinaceous~~ particles as claimed in claim 1 ~~37~~ to

a selection process which selects for said characteristic, and isolating proteinaceous particles which display a TCR having said characteristic, and optionally to an amplification process to multiply the isolated particles

and/or

a screening process which measures said characteristic, identifying those proteinaceous particles which display a TCR with the desired characteristic and isolating these proteinaceous particles, and optionally to an amplification process to multiply the isolated particles.

56. (withdrawn) The ~~A~~ method ~~as claimed in~~ of claim 55 ~~57~~ wherein the specific characteristic is increased affinity for a TCR ligand.

57. (withdrawn) A method for detecting a TCR ligand complex, comprising steps of ~~complexes, which comprises:~~

(i) providing ~~a TCR displaying proteinaceous particle (s) as claimed in~~ the phage particle of claim 1;

(ii) contacting the phage particle ~~said TCR displaying proteinaceous particle (s)~~ with a putative ligand complex; and

(iii) detecting binding of the phage particle ~~said TCR displaying proteinaceous particle(s)~~ to the putative ligand complexes.

58. (withdrawn) ~~A method as claimed in~~ The method of claim 57 wherein the putative TCR ligand complexes are complex is a peptide-MHC complex complexes.

59. (withdrawn) A method of identifying an inhibitor of the interaction between the phage particle of a TCR displaying proteinaceous particle(s) as claimed in claim 1, and a TCR-binding ligand, comprising steps of:

contacting the phage TCR displaying proteinaceous particle with a TCR-binding ligand, in the presence of and in the absence of a test compound, and

determining whether the presence of the test compound reduces binding of the phage particle TCR displaying proteinaceous particle(s) to the TCR-binding ligand, whereby reduced binding identifies the test compound as such reduction being taken as identifying an inhibitor of the interaction between the phage particle and the TCR-binding ligand.

60-85. (canceled)

86. (new) The phage particle of claim 1 wherein the interchain disulfide bond has no equivalent in native T cell receptors.

87. (new) The phage particle of claim 6 wherein the interchain disulfide bond has no equivalent in native T cell receptors.

88. (new) The phage particle of claim 1 wherein the interchain disulfide bond is between cysteine residues substituted for Thr 48 of exon 1 of TRAC*01 and Ser 57 of exon 1 of TRBC1*-1 or TRBC2*01 or the non-human equivalent thereof.

89. (new) The phage particle of claim 1 which is a filamentous phage and which displays on its surface a dTCR polypeptide pair comprising:

a first polypeptide wherein a sequence corresponding to a TCR α chain

variable domain sequence is fused to the N terminus of a sequence corresponding to a TCR α chain constant domain extracellular sequence; and

a second polypeptide wherein a sequence corresponding to a TCR β chain variable domain sequence is fused to the N terminus of a sequence corresponding to a TCR β chain constant domain extracellular sequence,

wherein the first and second polypeptides are linked by a disulfide bond between cysteine residues substituted for Thr 48 of exon 1 of TRAC*01 and Ser 57 of exon 1 of TRBC1*-1 or TRBC2*01 or the non-human equivalent thereof